

We Claim:

- 1 A light source comprising:
- 5 a. a light emitting component comprised of a semiconductor material,
- b. at least one phosphor material, and
- c. at least one UV reflecting material.
- 10 2. The light source of claim 1 wherein the light emitting component comprises a light emitting diode or a laser diode.
3. The light source of claim 2 wherein the light emitting component emits light in at least one of the blue region and the UV region of the electromagnetic spectrum.
- 15 4. The light source of claim 1, wherein said phosphor is excited by light emitted from the said light emitting component.
5. The light source of claim 1 wherein said phosphor converts UV light to visible.
- 20 6. The light source of claim 1 wherein said UV reflecting material reflects UV light into the phosphor layer.
7. The light source of claim 1 wherein said UV reflecting material reflects at least a substantial portion of UV light emitted by said light emitting component.

8. The light source of claim 1 wherein said UV reflecting material reflects at least 90% of any UV light not converted to visible light by said phosphor.
- 5 9. The light source of claim 1 wherein said UV reflecting material comprises alumina.
10. The light source of claim 1 wherein said UV reflecting material comprises alpha alumina, gamma aluminum, and mixtures thereof.
- 10 11. The light source of claim 10 wherein said UV reflecting material contains about 5-80 wt% gamma alumina and about 20-95 wt% alpha alumina.
12. The light source of claim 1 wherein said UV reflecting material is disposed as a layer adjacent to the phosphor.
- 15 13. The light source of claim 1 wherein said UV reflecting material is disposed as a layer adjacent a layer of a transparent material.
- 20 14. The light source of claim 1 wherein said UV reflecting material is dispersed in a phosphor containing layer.

15. The light source of claim 14 wherein the concentration of UV reflecting material dispersed throughout the phosphor is not greater than about 25% by volume of said phosphor.

5 16. The light source of claim 1 wherein said UV reflecting layer reflects light in the range of about 350-400 nm.

10 17. The light source of claim 1 wherein said phosphor layer converts light reflected by the UV reflecting layer to visible light.

18. A white light emitting device comprising:

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- a. a light emitting diode,
 - b. at least one phosphor containing layer,
 - c. at least one UV reflecting material containing layer, and
 - d. at least one encapsulant layer, said UV reflecting material containing layer disposed outwardly from said phosphor containing layer.

19. A light emitting device comprising:

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- a. an LED of the formula $\text{In}_I\text{Ga}_J\text{Al}_K\text{N}$, wherein I, J, and K are each greater than or equal to zero, and $I+J+K=1$,
 - b. a phosphor layer, and
 - c. an encapsulant layer including a UV reflecting material and/or a UV reflecting layer.